

DNA MOTORING OEM-SS-012

DNA MOTORING OEM-SS-012 ABS Wheel Speed Sensor Instruction Manual

1. INTRODUCTION

This instruction manual provides essential information for the installation, operation, and maintenance of the DNA MOTORING OEM-SS-012 ABS Wheel Speed Sensor. This sensor is a critical component of your vehicle's Anti-lock Braking System (ABS), designed to monitor wheel speed and ensure proper ABS function. Please read this manual thoroughly before installation.

2. PRODUCT OVERVIEW

The DNA MOTORING OEM-SS-012 is a factory-style replacement ABS wheel speed sensor. It is engineered to provide accurate wheel speed data to your vehicle's ABS control module, which is vital for the correct operation of the anti-lock braking system. A malfunctioning ABS sensor can lead to an illuminated ABS warning light on your dashboard and compromise braking performance.



Figure 2.1: The DNA MOTORING OEM-SS-012 ABS Wheel Speed Sensor assembly. This image shows the complete sensor unit with its cable and connectors.

Key Features:

- Direct replacement design for straightforward installation.
- Sealed wire connections to resist corrosion.
- Shielded wire harness for protection against environmental elements.
- Designed to reduce electrical noise and signal interference.
- Performance comparable to original equipment (OE) specifications.

3. COMPATIBILITY

This ABS Wheel Speed Sensor (OEM-SS-012) is compatible with specific Mercedes-Benz models. Please verify your vehicle's make, model, and year against the list below to ensure proper fitment:

- 2007-2008 Mercedes-Benz CL500
- 2007-2010 Mercedes-Benz CL550
- 2007-2010 Mercedes-Benz CL600
- 2008-2010 Mercedes-Benz CL63 AMG
- 2008-2010 Mercedes-Benz CL65 AMG
- 2010 Mercedes-Benz S400
- 2009 Mercedes-Benz S450
- 2008-2009 Mercedes-Benz S500

- 2007-2010 Mercedes-Benz S550
- 2007-2010 Mercedes-Benz S600
- 2008-2010 Mercedes-Benz S63 AMG
- 2007-2010 Mercedes-Benz S65 AMG

4. PACKAGE CONTENTS

The package includes the following item:

- 1 X ABS Wheel Speed Sensor (DNA MOTORING OEM-SS-012)

5. INSTALLATION INSTRUCTIONS

Safety First: *Always disconnect the vehicle's battery before performing any electrical work. Ensure the vehicle is securely supported on jack stands. If you are unsure about any step, consult a qualified mechanic.*

1. **Prepare the Vehicle:** Park the vehicle on a level surface, engage the parking brake, and block the wheels. Raise the vehicle and support it with jack stands.
2. **Locate the Old Sensor:** Identify the existing ABS wheel speed sensor on the rear left or right axle, typically near the brake rotor or wheel hub.
3. **Disconnect Electrical Connector:** Carefully disconnect the electrical connector from the old sensor. Observe the locking tab mechanism.



Figure 5.1: A close-up image showing the electrical connector of the ABS wheel speed sensor. The connector is black with a reddish-orange seal, designed for a secure and corrosion-resistant connection.

- 4. Remove Mounting Bolt:** Use an appropriate wrench or socket to remove the mounting bolt that secures the sensor to the wheel hub assembly.



Figure 5.2: A detailed view of the sensor head, showing the brass-colored mounting hole and the black plastic body. A small blue mark is visible on the sensor body.



Figure 5.3: Another perspective of the sensor head, highlighting the mounting bracket and the sensor's elongated tip.

5. **Remove Old Sensor:** Gently pull the old sensor out of its mounting bore. It may require some wiggling due to dirt or corrosion.
6. **Clean Mounting Area:** Clean the sensor mounting bore and surrounding area to ensure a proper fit for the new sensor.
7. **Install New Sensor:** Insert the new DNA MOTORING OEM-SS-012 sensor into the mounting bore. Ensure it seats correctly.



Figure 5.4: A close-up of the black rubber grommet on the sensor cable, designed to secure the cable and protect it from chafing or environmental damage.

8. **Secure Mounting Bolt:** Reinstall and tighten the mounting bolt to the manufacturer's specified torque. Do not overtighten.
9. **Connect Electrical Connector:** Connect the new sensor's electrical connector, ensuring it clicks securely into place.
10. **Route Wiring:** Route the sensor wiring along the original path, securing it with any clips or ties to prevent contact with moving parts.
11. **Test System:** Reconnect the vehicle's battery. Start the engine and check for any ABS warning lights. Drive the vehicle briefly to allow the system to self-test. If the ABS light remains on, refer to the Troubleshooting section.

6. OPERATION

Once correctly installed, the DNA MOTORING OEM-SS-012 ABS Wheel Speed Sensor continuously monitors the rotational speed of the wheel. This data is transmitted to the ABS control module. During braking, if the module detects a wheel locking up, it rapidly modulates brake pressure to prevent skidding, maintaining steering control. The sensor operates automatically and requires no user intervention during normal driving.

7. MAINTENANCE

The ABS wheel speed sensor is generally a maintenance-free component. However, periodic inspection during routine vehicle service is recommended:

- **Visual Inspection:** Check the sensor and its wiring for any signs of physical damage, corrosion, or loose connections.
- **Cleaning:** If accessible, gently clean any accumulated dirt or debris from the sensor head, ensuring not to damage the sensor.
- **Wiring Integrity:** Ensure the wiring harness is securely routed and free from chafing or cuts.

8. TROUBLESHOOTING

If you experience issues after installing the ABS wheel speed sensor, consider the following:

- **ABS Warning Light Remains On:**
 - *Check Connections:* Ensure all electrical connectors are fully seated and secure.
 - *Inspect Wiring:* Verify that the sensor wiring is not damaged, pinched, or improperly routed.
 - *Scan for Codes:* Use an OBD-II scanner to retrieve diagnostic trouble codes (DTCs) from the ABS system. This can pinpoint the exact issue. Common codes related to wheel speed sensors include C0031-C0035 (for specific wheel sensor faults).
 - *Sensor Installation:* Confirm the sensor is correctly seated in its bore and the mounting bolt is tightened.
- **Incorrect Speed Readings:** While rare, if speed readings are erratic, re-check the sensor's seating and wiring. Ensure the sensor head is not obstructed by debris.
- **Intermittent ABS Activation:** This could indicate an intermittent signal loss. Inspect connections and wiring thoroughly.

If troubleshooting steps do not resolve the issue, professional diagnosis by a qualified mechanic is recommended.

9. SPECIFICATIONS

Attribute	Detail
Brand	DNA MOTORING
Model	OEM-SS-012
Material	Acrylonitrile Butadiene Styrene
Item Weight	0.07 Kilograms (2.46 ounces)
Style	Modern
Measurement Accuracy	±3%
Measuring Range	5 centimeters
Mounting Type	Flange Mount
Output Type	Analog

Attribute	Detail
Sensing Distance	5 Centimeters
Specific Uses For Product	Speed
Upper Temperature Rating	246 Degrees Celsius
UPC	194286060978
Manufacturer	DNA Motoring
Package Dimensions	4.41 x 3.66 x 1.57 inches
Position	Rear

10. WARRANTY AND SUPPORT

For warranty information or technical support regarding your DNA MOTORING OEM-SS-012 ABS Wheel Speed Sensor, please contact DNA MOTORING directly or visit their official brand store.

Visit the DNA MOTORING Store: [DNA MOTORING Official Store](#)